

2015-1785, -1787

**IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

5TH MARKET, INC.,

Appellant,

v.

CHICAGO MERCANTILE EXCHANGE, INC.,

Cross-Appellant.

**Appeal from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in Case No. CBM2013-00027**

**REPLY BRIEF FOR CROSS-APPELLANT
CHICAGO MERCANTILE EXCHANGE, INC.**

Erika H. Arner
Edward J. Naidich
Charles T. Collins-Chase
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
901 New York Avenue, NW
Washington, DC 20001-4413
(202) 408-4000

January 14, 2016

*Attorneys for Cross-Appellant
Chicago Mercantile Exchange, Inc.*

CERTIFICATE OF INTEREST

Counsel for Chicago Mercantile Exchange, Inc., certify the following:

1. The full name of every party or amicus represented by me is:

Chicago Mercantile Exchange, Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

N/A

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

CME Group, Inc.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this Court are:

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP

Erika H. Arner
Edward J. Naidich
Timothy P. McAnulty
Charles T. Collins-Chase
Justin Loffredo

BRINKS HOFER GILSON & LIONE

Jon H. Beaupre
Richard K. DeMille
Gary M. Ropski

CHICAGO MERCANTILE EXCHANGE, INC.

Matthew J. Kelly

TABLE OF CONTENTS

	Page
CERTIFICATE OF INTEREST	i
TABLE OF CONTENTS.....	ii
I. The Board Erred in Confirming New Claim 54 Because 5 th Market Did Not Meet Its Burden to Establish the Claim Is Patentable over the Prior Art of Record	1
A. 5 th Market Incorrectly Argues That CME Failed to Challenge New Claim 54 Before the Board	1
B. 5 th Market Ignores This Court’s and the Board’s Precedent Requiring Patent Owners to Distinguish Prior Art of Record	2
C. 5 th Market Wrongly Argues That Requiring a Patentee to Show New Claims Are Patentable over the Prior Art of Record “Would Create a Timely, Expensive, and Needless Exercise in Analysis”	6
D. 5 th Market’s Motion to Amend Did Not Address Any Prior Art, and Thus Failed to Establish That Claim 54 Is Patentable	8
II. The Board Erred in Confirming New Claim 54 Because It Impermissibly Broadens the Scope of the Claims.....	11
III. CONCLUSION.....	12

TABLE OF AUTHORITIES

	Page(s)
Federal Cases	
<i>Idle Free Systems, Inc. v. Bergstrom, Inc.</i> , IPR2012-00027, 2013 WL 5947697 (PTAB June 11, 2013)	2
<i>Jewelry Channel, Inc. USA v. America’s Collectibles Network, Inc.</i> , CBM2014-00119, 2015 WL 417753 (PTAB Feb. 2, 2015).....	4
<i>Jewelry Channel, Inc. USA v. America’s Collectibles Network, Inc.</i> , CBM2014-00119, 2015 WL 727164 (PTAB Feb. 20, 2015).....	5
<i>MasterImage 3D, Inc. v. RealD Inc.</i> , IPR2015-00040, 2015 WL 4383224 (PTAB July 15, 2015).....	2, 9
<i>Microsoft Corp. v. Proxyconn, Inc.</i> , 789 F.3d 1292 (Fed. Cir. 2015)	passim
<i>MotionPoint Corp. v. TransPerfect Global, Inc.</i> , CBM2014-00060, 2015 WL 4381591 (PTAB July 15, 2015)	5
<i>MotionPoint Corp. v. TransPerfect Global, Inc.</i> , CBM2014-00060, 2014 WL 5429971 (PTAB Oct. 27, 2014).....	5
<i>MotionPoint Corp. v. TransPerfect Global, Inc.</i> , CBM2014-00060, 2014 WL 1063588 (PTAB Jan. 23, 2014)	5
<i>Prolitec, Inc. v. ScentAir Technologies, Inc.</i> , 807 F.3d 1353 (Fed. Cir. 2015)	7, 8, 9
Federal Statutes	
35 U.S.C. § 101	4-5
35 U.S.C. § 102	5
35 U.S.C. § 103	5
35 U.S.C. § 112	5, 8
35 U.S.C. § 318(b)	3

35 U.S.C. § 326(d)	2, 12
35 U.S.C. § 328	3, 11
Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18(a)(1), 125 Stat. 284, 329-30 (2011)	3
Federal Regulations	
37 C.F.R. § 42.20	2, 3, 7, 8, 11
Other Authorities	
H.R. Rep. No. 112-98, pt. 1 (2011), <i>as reprinted in</i> 2011 U.S.C.C.A.N. 67	7
Robert T. Daigler, <i>Advanced Options Trading: The Analysis and Evaluation of Trading Strategies, Hedging Tactics & Pricing Models</i> (1994)	10

I. THE BOARD ERRED IN CONFIRMING NEW CLAIM 54 BECAUSE 5TH MARKET DID NOT MEET ITS BURDEN TO ESTABLISH THE CLAIM IS PATENTABLE OVER THE PRIOR ART OF RECORD

A. 5th Market Incorrectly Argues That CME Failed to Challenge New Claim 54 Before the Board

5th Market¹ incorrectly contends that Chicago Mercantile Exchange, Inc. (“CME”) “failed to argue unpatentability of proposed substitute claim 54 to the Board,” and that CME “should not be permitted to submit new claims and arguments to invalidate Claim 54 after it failed to do so to the Board below.” 5th Market Resp. Br. 20-21. On the contrary, CME consistently argued to the Board that 5th Market failed to meet its burden to show patentability of the proposed substitute claims, including claim 54, and that 5th Market’s proposed new claims are invalid over the prior art.

For example, CME argued in its Opposition to 5th Market’s Motion to Amend adding substitute claims 50-72 that, “[b]ecause Fifth Market has not adequately shown how the new claims are patentable over the prior art, Fifth Market’s motion [to amend] is deficient and should be denied.” JA462. CME further argued that the proposed substitute dependent claims, including claim 54, would have been obvious over the combination of the CFTC and Lupien references

¹ The assignment on file for U.S. Patent No. 6,418,419 (“the ’419 patent”) names “5th Market, LLC,” as the assignee. To CME’s knowledge, however, no such company exists or ever existed. A Tennessee company called “Fifth Market, Inc.,” also claims ownership of this patent, and thus it is unclear whether “5th Market, Inc.,” is the owner of the ’419 patent.

and the additional prior art cited in the petition for the original dependent claims. JA462-65. Similarly, CME argued in its Opposition to 5th Market's Request for Rehearing that "Fifth Market has not alleged, let alone proven, that claim 54 is patentable over any prior art known to it." JA617. CME also asserted that "[t]he Board's decision regarding [original] claim 5 does not relieve Fifth Market's burden to show that claim 54 meets all statutory and regulatory requirements" under 37 C.F.R. § 42.20(c), 35 U.S.C. § 326(d)(1)(B), and the other governing regulations. *See* JA618.

B. 5th Market Ignores This Court's and the Board's Precedent Requiring Patent Owners to Distinguish Prior Art of Record

5th Market fails to cite or address *Microsoft Corp. v. Proxyconn, Inc.*, in which the Court held that the patentee bears the burden to show patentability of proposed substitute claims over the prior art of record. 789 F.3d 1292, 1307 (Fed. Cir. 2015). Similarly, 5th Market does not cite or address the Board's *Idle Free* and *MasterImage 3D* decisions, in which the Board explains a patentee's burden to establish patentability over the prior art of record. *See MasterImage 3D, Inc. v. RealD Inc.*, IPR2015-00040, 2015 WL 4383224 (PTAB July 15, 2015); *Idle Free Systems, Inc. v. Bergstrom, Inc.*, IPR2012-00027, 2013 WL 5947697, at *4 (PTAB June 11, 2013).

In *Proxyconn*, the Court affirmed the Board's interpretation of the U.S. Patent and Trademark Office's ("USPTO") regulation in 37 C.F.R. § 42.20, under

which the patentee bears the burden of establishing that proposed substitute claims are patentable over the prior art of record, including—as here—prior art cited in the petition, even if not instituted. *Id.* The Court, citing 35 U.S.C. § 318(b), explained that the USPTO Director “should incorporate only those amended claims that are ‘determined to be patentable.’” *Id.* (citing 35 U.S.C. § 318(b)).² The Court further explained that the USPTO’s regulations require the moving party—the patentee, in the context of a motion to amend—“to establish that it is entitled to the requested relief.” *Id.* at 1306-07; *see also* 37 C.F.R. § 42.20(c). In other words, the USPTO must determine that any proposed new claim is patentable over the prior art before it confirms the claim, and the USPTO has placed the burden on the patentee to show it is entitled to the new claim by establishing that the claim is patentable over the prior art of record in the trial.

5th Market’s contention that a “narrowing amendment to correct an indefiniteness problem does not invoke a rationale” for comparing the new claim to the prior art of record is completely unsupported, and the newly proposed principle lacks any foundation in the law. 5th Market Resp. Br. 23. 5th Market fails to identify any basis for this departure from the governing statutes and regulation

² The Court in *Proxyconn* analyzed the statute applicable to *inter partes* review (“IPR”) proceedings, 35 U.S.C. § 318(b). An identically worded statute, 35 U.S.C. § 328(b), governs covered business method (“CBM”) review proceedings. *See* Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 18(a)(1), 125 Stat. 284, 329-30 (2011).

and from the Board's own interpretation of the regulation, all of which place the burden on the patentee to show the patentability of proposed new claims. Indeed, the reasoning in *Proxyconn* applies regardless of the Board's rationale for canceling the original claims. Requiring a patentee to show the patentability of a new claim amended to overcome indefiniteness furthers the purpose of post-grant review by preventing unexamined claims from issuing. *See Proxyconn*, 789 F.3d at 1307 (“[O]nce the PTO grants a patentee's motion to amend, the substituted claims are not subject to further examination.”). This is particularly important where, as here, prior art references of record in the trial disclose the limitations of the proposed new claim.

The Board has applied this requirement in other CBM proceedings where the original claims were canceled on grounds other than anticipation or obviousness. In *Jewelry Channel, Inc. USA v. America's Collectibles Network, Inc.*, for example, the Board rejected the original claims only under 35 U.S.C. § 101, but nonetheless expressly informed the patentee of its burden to show patentable distinction of proposed new claims over the prior art. *See* CBM2014-00119, 2015 WL 417753 (PTAB Feb. 2, 2015). In the Board's Summary of Conference Concerning Proposed Motion to Amend, it stated that, “[i]n all circumstances, Patent Owner must make a showing of patentable distinction over the prior art. This requirement applies, even in this proceeding, where the sole challenge being

tried is that [the claims] do not recite patentable subject matter under 35 U.S.C. § 101.” *Id.* (emphasis added). Accordingly, the patentee in its motion to amend addressed the prior art of record and submitted an expert declaration allegedly distinguishing the proposed new claims over numerous prior art references. *Jewelry Channel, Inc. USA v. Am.’s Collectibles Network, Inc.*, CBM2014-00119, 2015 WL 727164 (PTAB Feb. 20, 2015).

Similarly, in *MotionPoint Corp. v. TransPerfect Global, Inc.*, the Board instituted CBM review of the original claims based on two separate grounds under 35 U.S.C. § 112, but did not institute review based on the prior art. *See* CBM2014-00060, 2015 WL 4381591 (PTAB July 15, 2015). Indeed, the petitioner challenged the claims only under § 112 and not under 35 U.S.C. § 102 or § 103, and thus did not cite any prior art. *MotionPoint Corp. v. TransPerfect Global, Inc.*, CBM2014-00060, 2014 WL 1063588 (PTAB Jan. 23, 2014). The patent owner nonetheless adhered to the Board’s requirement that all motions to amend must distinguish the prior art and thus addressed the prior art in its motion to amend, arguing that the proposed new claims are patentable over prior art cited in concurrently filed CBM proceedings and in copending reexaminations. *See MotionPoint Corp. v. TransPerfect Global, Inc.*, CBM2014-00060, 2014 WL 5429971 (PTAB Oct. 27, 2014).

Under 5th Market's reasoning, it would be proper for the Board to confirm a new claim despite limiting its prior art analysis to only the prior art applied in the institution decision, without considering all of the prior art in the CBM petition or prior art in the patent's prosecution history. 5th Market's interpretation thus conflicts with this Court's and the Board's decisions explaining that the patentee must distinguish the prior art in the record to prevent the Board from replacing an invalid original claim with an invalid new claim.

C. 5th Market Wrongly Argues That Requiring a Patentee to Show New Claims Are Patentable over the Prior Art of Record “Would Create a Timely, Expensive, and Needless Exercise in Analysis”

5th Market is incorrect that requiring a patentee to show patentability over the prior art of record “would create a timely, expensive, and needless exercise in analysis.” 5th Market Resp. Br. 22. As this Court has explained, this requirement furthers the goals of post-grant review by preventing invalid claims from issuing and, moreover, appropriately places the burden on the party that is best positioned to address the prior art.

The Court in *Proxycorr*, for example, pointed out that the Board's requirement is consistent with the statutory goal of creating a streamlined process to improve patent quality by helping prevent invalid new claims from being confirmed:

During IPRs, once the PTO grants a patentee's motion to amend, the substituted claims are not subject to further

examination. Moreover, the petitioner may choose not to challenge the patentability of substitute claims if, for example, the amendments narrowed the claims such that the petitioner no longer faces a risk of infringement. *If the patentee were not required to establish patentability of substitute claims over the prior art of record, an amended patent could issue despite the PTO having before it prior art that undermines patentability.* Such a result would defeat Congress’s purpose in creating IPR as part of “a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.”

789 F.3d at 1307-08 (emphasis added) (quoting H.R. Rep. No. 112-98, pt. 1, at 40 (2011), *as reprinted in* 2011 U.S.C.C.A.N. 67, 69).

The Court in *Proxycorr* noted that analysis by the patentee is particularly important because a proposed new claim may no longer pose an infringement risk to the petitioner, and thus the petitioner may have little incentive to point out how the amended claim is invalid over the prior art of record. *Id.* at 1307. Requiring the patentee to make its case thus helps achieve the goals of post-grant review by ensuring that the Board is able to compare any proposed new claims to the prior art of record and avoid unknowingly confirming invalid new claims.

In *Prolitec, Inc. v. ScentAir Technologies, Inc.*, the Court similarly concluded that the Board’s interpretation of 37 C.F.R. § 42.20, requiring a patentee to show patentability over prior art of record, helps advance the goals of post-grant review and does not place an undue burden on the patentee. 807 F.3d 1353, 1363-64 (Fed. Cir. 2015). The Court noted the importance of assessing prior art

beyond what was cited in the IPR or CBM petition, pointing out that “[t]he prior art references cited in the original patent’s prosecution history often will be the closest prior art and will already have been reviewed by the patentee.” *Id.*

Echoing the reasoning in *Proxyconn*, the Court in *Prolitec* added that “[e]valuating the substitute claims in light of this prior art helps to effectuate the purpose of IPRs to ‘improve patent quality and limit[] unnecessary and counterproductive litigation costs.’” *Id.* (quoting *Proxyconn*, 789 F.3d at 1308). 5th Market is thus incorrect that requiring a patentee to show patentability over the prior art of record “would create a timely, expensive, and needless exercise in analysis.” 5th Market Resp. Br. 22.

D. 5th Market’s Motion to Amend Did Not Address Any Prior Art, and Thus Failed to Establish That Claim 54 Is Patentable

5th Market wrongly asserts that claim 54 “was properly found patentable over the prior art of record.” *Id.* at 21-23. On the contrary, the Board stated in its Rehearing Decision that it would *not* require 5th Market to carry its burden under 37 C.F.R. § 42.20(c) to show the new claim’s patentability over any additional prior art because 5th Market amended the claim to overcome § 112 indefiniteness. JA63-65. The Board thus excused 5th Market’s failure in its Motion to Amend to distinguish claim 54 over any prior art. Indeed, 5th Market’s motion did not cite a single piece of prior art.

5th Market’s contention that the Board somehow still assessed the patentability of claim 54 over the “prior art of record” ignores the scope that the Board and this Court have given to that term. In *MasterImage 3D*, for example, the Board defined “prior art of record” to include: (1) “any material art of record in the current proceeding, including art asserted in grounds on which the Board did not institute review”; (2) “any material art of record in any other proceeding before the [USPTO] involving the patent”; and (3) “any material art in the prosecution history of the patent.” *MasterImage 3D*, IPR2015-00040, 2015 WL 4383224. In *Proxyconn*, this Court affirmed the Board’s holding that a patentee must show patentability over art cited in an IPR petition, even if the Board did not rely on that art when instituting review of the claims at issue. 789 F.3d at 1306-07. Similarly, the Court in *Prolitec* affirmed the Board’s holding that a patentee must also show patentability over art cited during original prosecution. 807 F.3d at 1363-64.

Based on this definition of “prior art of record,” neither 5th Market nor the Board properly compared new claim 54 to the prior art of record. On the contrary, 5th Market failed to distinguish claim 54 over any prior art, including references from *all three* of the *MasterImage 3D* categories teaching the limitation added by claim 54. As detailed in CME’s Cross-Appellant’s Brief, the “yield spread” limitation that allegedly distinguishes claim 54 over the prior art was well known in the art at the time of invention. *See* Cross-Appellant’s Br. 46. Indeed, the record

in this case includes at least three references that disclose the “yield spread” limitation, including in the context of trading securities options. *See id.* at 44-47.

As noted in CME’s Cross-Appellant’s Brief, for example, “yield spread” is a standard finance concept and is defined in the *Dictionary of Finance and Investment Terms*, which the Board relied on in instituting review of two original claims of the ’419 patent. *See id.* at 44-45 (citing JA2221); JA119. Moreover, during original prosecution, the USPTO examiner took “Official Notice” that “the possible dependency of the price on one or more of several factors (such as current value, a volatility, a yield, or a yield spread) is old and well known in the art.” ’419 Patent Prosecution History, Non-Final Office Action, at 8 (Oct. 24, 2000); *see also* Cross-Appellant’s Br. 45-46.

5th Market’s Motion to Amend also failed to address the Daigler reference, which teaches trading securities options “at a specified yield spread.” Robert T. Daigler, *Advanced Options Trading: The Analysis and Evaluation of Trading Strategies, Hedging Tactics & Pricing Models* 290 (1994). This reference was cited during the *ex parte* reexaminations of the ’419 patent, and thus 5th Market was aware of Daigler and its teaching of trading securities options based on yield spread. *See* Cross-Appellant’s Br. 46-47.

Both 5th Market’s Motion to Amend and its brief before this Court fail to address these references or explain how claim 54 is patentable over them. As a

result, the Board erroneously confirmed a new claim that would have been obvious over the prior art. The Board’s decision thus is inconsistent with both 35 U.S.C. § 328 and 37 C.F.R. § 42.20(c), and this Court should reverse the Board’s ruling. In the alternative, the Court should at least vacate the Board’s decision and remand for it to consider the patentability of claim 54 in light of the prior art of record, as defined in *MasterImage 3D*.

II. THE BOARD ERRED IN CONFIRMING NEW CLAIM 54 BECAUSE IT IMPERMISSIBLY BROADENS THE SCOPE OF THE CLAIMS

5th Market contends that new claim 54 merely narrows original claim 5, but fails to explain how *deleting* a claim limitation makes the claim narrower. 5th Market’s Resp. Br. 23-24. As detailed in CME’s Cross-Appellant’s Brief, original claim 5 recited a “controller computer comprising . . . means for *matching or comparing* . . . algorithmic buy/sell orders with algorithmic or non-algorithmic sell/buy orders through use of multiple data sources.” Cross-Appellant’s Br. 49 (quoting JA147[1:57-61, 2:3-4]). The claimed system can only perform the function of “matching or comparing” if it is able to operate in *either* of two separate modes—a “matching” mode or a “comparing” mode.

New claim 54, by contrast, only needs to operate in one mode, in which it matches the buy/sell and sell/buy orders. Claim 54 is thus broader than original claim 5 because the system requires less algorithm support to be able to perform the claimed function. Accordingly, 5th Market’s deletion of a claim limitation

impermissibly broadened claim 54, and this Court should therefore reverse the Board's Rehearing Decision confirming the claim. *See* 35 U.S.C. § 326(d)(3).

III. CONCLUSION

For these reasons, the Court should reverse the Board's decision confirming the patentability of 5th Market's proposed amended claim 54 because the Board failed to assess the patentability of claim 54 over the prior art of record and because claim 54 impermissibly broadens the scope of the claims.

Date: January 14, 2016

Respectfully submitted,

/s/Erika H. Arner

Erika H. Arner

Edward J. Naidich

Charles T. Collins-Chase

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, LLP

901 New York Avenue, NW

Washington, DC 20001-4413

(202) 408-4000

Attorneys for Cross-Appellant

Chicago Mercantile Exchange, Inc.

CERTIFICATE OF SERVICE

I certify that the foregoing REPLY BRIEF FOR CROSS-APPELLANT CHICAGO MERCANTILE EXCHANGE, INC., was filed electronically using the CM/ECF system and served upon registered counsel by operation of the Court's CM/ECF system on January 14, 2016.

/s/Donna Stockton
Donna Stockton

CERTIFICATE OF COMPLIANCE

I certify that this REPLY BRIEF FOR CROSS-APPELLANT CHICAGO MERCANTILE EXCHANGE, INC., contains 2,852 words as measured by the word-processing software used to prepare this brief.

/s/Charles T. Collins-Chase

Charles T. Collins-Chase
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
901 New York Avenue, NW
Washington, DC 20001-4413
(202) 408-4000

*Attorney for Cross-Appellant
Chicago Mercantile Exchange, Inc.*